

## ABSTRACT

A semiconductor device in which the lifetime of mounted components can be prolonged. A cooling system for controlling the temperature of a refrigerant through a heating section (1) and a radiator (2) is provided. The semiconductor device (100) is connected to the cooling system and is cooled. A variation width ( $\Delta T_1$ ) of temperature controlled by the cooling system through the heating section (1) and the radiator (2) is larger than a temperature variation ( $\Delta T_2$ ) of the refrigerant caused by variations in operating conditions of the semiconductor device (100) ( $\Delta T_1 > \Delta T_2$ ).